

#### Abstract of the Disclosure

The present invention relates generally to any electrolyte and methods for monitoring the constituents contained therein. More specifically, the present invention relates to plating baths and methods for monitoring the constituents contained therein based on chemometric analysis of voltammetric data obtained for these baths. More particularly, the method of the present invention relates to application of numerous chemometric techniques of modeling power, outlier detection, regression and calibration transfer for analysis of voltammetric data obtained for various plating baths.